

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kenneth Kohn on 4 June 2010.

The application has been amended as follows:

Please amend claim 1 to read as follows:

--A method of detecting informative markers of early stage cancer by:

differentially biopanning sera obtained from normal individuals and patients with early stage cancer against epitope-expressing phage display libraries;

obtaining epitope bearing clones displaying reactivity to antibodies present in sera of patients with early stage cancer but not in sera of normal individuals, including the step of identifying and excluding the sera of normal individuals that react strongly but nonspecifically to epitope bearing clones, wherein the step of excluding the sera of normal individuals which react strongly but nonspecifically to epitope bearing clones further includes the step of excluding sera which show a unimodal pattern of dual fluorescence reaction with epitope bearing clones, where a first color indicates reaction with human immunoglobulin and a second color indicates reaction to phage capsid proteins;

identifying all epitopes that are specific to patients with early stage cancer as informative markers of early stage cancer; and

including all epitopes identified as informative markers in a microarray assay designed to detect early stage cancer.--

#### **Information Disclosure Statement**

It is noted that the Information Disclosure Statement filed 8 August 2003 is included with this Office Action to correct an error in the IDS. That IDS was previously considered in full by the Examiner, however, the Examiner inadvertently did not include an initial for the Kohonen (1998) reference entitled "Learning Vector Quantization" in the Neural Networks Journal. The IDS is now corrected.

#### **Reasons for Allowance**

The following is an examiner's statement of reasons for allowance: Claim 21 is allowed. Claims 1-20 and 22 have been cancelled. Claim 21 is allowed for the reasons of record. Specifically, the prior art does not teach or fairly suggest the method of differentially biopanning sera from normal individuals and patients with early stage cancer that includes the specific steps of excluding the sera of normal individuals that react strongly but nonspecifically to epitope bearing clones which includes excluding sera which show a unimodal pattern of dual fluorescence reaction to epitope bearing clones where a first color indicates reaction with human immunoglobulin and a second color indicates reaction to phage capsid proteins.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Drawings**

The Replacement Drawings submitted 23 May 2003 have been accepted.

### **Inquiries**

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The Central Fax Center Number is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lori A. Clow, Ph.D., whose telephone number is (571) 272-0715. The examiner can normally be reached on Monday-Friday from 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjorie Moran can be reached on (571) 272-0720.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete

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service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

June 9, 2010

/Lori A. Clow, Ph.D./

Primary Patent Examiner

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